

REMARKS

In the non-Final Office Action mailed on November 29, 2007, claims 1-6, 8-19, 27-32 and 34-38 were pending and stand rejected. Claims 1, 27 and 36 are amended. Reconsideration of and allowance of the present application including claims 1-6, 8-19, 27-32 and 34-38 is respectfully requested.

Claims 27-32, 34, and 35 stand rejected under 35 USC §103(a) as being unpatentable over U.S. Patent No. 5,505,732 to Michelson alone. The Office Action asserts that Michelson discloses the claimed invention except for the portions of the device being releasably engageable with other portions of the device and the engagement mechanism comprising a finger and receptacle type engagement mechanism. The Office Action then asserts that it would have been obvious to one having ordinary skill in the art at the time the invention was made to have separated what can be considered the guide sleeve housing (namely ref. 344) from the guide sleeve, ref. 348), since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art.

In order to support a rejection under 35 USC §103(a), the reference must teach or suggest all elements in the claim arranged in the manner recited in the claim. The Office Action asserts that ref. 348 in Fig. 7F of Michelson (tubular portions 348) is a shaft, that towards ref. 344 (footplate 344) is an engaging portion at a distal end of the shaft, and that ref. 102 is a distractor tip extending distally of the engaging portion. The Office Action also asserts "wherein said engaging portion is enlarged (Fig. 7F) and extends outwardly from each of said shaft and said distractor tip (Fig. 7F)." A review of Fig. 7F reveals no part of paired tubular portions 348 at their distal end that extends outwardly from the proximal portion. The only structure in Fig. 7F that does extend outwardly from tubular portions 348 at their distal end is foot plate 344. However, if footplate 344 is considered the engaging portion with an enlarged configuration then the rejection is deficient since it fails to identify any teaching or suggestion of a member in which footplate 344 is positioned that is releasably engageable with footplate 344 as recited in claim 27. Therefore, a prima facie case for rejecting claim 27 has not been established since the Office Action fails to provide the necessary teaching or suggestion of all the elements in claim 27 arranged in the manner recited in claim 27.

Furthermore, the Office Action fails to provide any indication of how it is taught or suggested that paired tubular portions 348 would or could be arranged with footplate 344 so that when

assembled "said enlarged configuration being sized and shaped to fit in said proximal chamber with a close interfit to provide a rigid assembly between said engaging portion and said guide sleeve housing." The complete silence as to the teaching or suggestion of this arrangement between the elements in claim 27 further indicates that a prima facie case has not been established.

Claims 28-32 and 34-35 depend from claim 27 and are allowable at least for the reasons claim 27 is allowable and for other reasons. For example, in rejecting claims 31 and 32, it appears that the Office Action also asserts that "Michelson discloses connecting various instruments together using a flange and groove (i.e. a finger and receptacle), which is a well known technique used to connect instruments together (col. 22, lines 6-11). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have constructed the guide sleeve housing and the engaging portion with a flange and receptacle type connection, since Michelson discloses that such a mechanism is well known in the art to connecting instruments together."

The referenced portion of Michelson (col. 22, lines 6-11) states "[n]ot shown here, but well known to those skilled in the art, are various mechanism to lockably adjust such instruments as drills. Such mechanism include, but are not limited to, the use of collets, threaded shafts with lock nuts, and flanges engaging grooves forced therein by either a cap pulled over the flanges or screwed down upon them." In the preceding paragraph from col. 21, line 56 to col. 22, line 5, Michelson discusses a drill 240 that includes a circumferential collar 248 of an increased diameter to serve to limit the depth of penetration of drill 240 that "may be fixed, or lockably adjustable." Accordingly, the cited portion of Michelson is discussing techniques for securing collar 248 to drill 240 in a lockably adjustable manner.

Claim 31 recites "wherein said engaging portion includes a receptacle formed therein and a finger movable out of said receptacle to an engagement position wherein said finger engages said guide sleeve housing in said proximal chamber and wherein said finger is movable to a release position into said receptacle to release said guide sleeve housing from said engaging portion." Claim 32 recites "wherein said distractor tip is rotatable relative to said engaging portion with said shaft, said distractor tip having a distraction configuration which positions said finger in said engagement position and said distractor tip is rotatable from said distraction configuration to a reduced height configuration by rotating said shaft relative to said engaging portion, wherein rotation of said shaft also moves said finger to said release position." The

disclosure that "flanges engaging grooves forced therein by either a cap pulled over the flanges or screwed down upon them" in Michelson is silent as to any finger moving into a receptacle in a release position or out of a receptacle in an engagement position, and the Office Action fails to provide any teaching or suggestion of these features. Nor has the Office Action provided support for the rejection that rotation of a distractor moves any finger from an engagement position to a release position relative to a guide sleeve housing. Accordingly, a prima facie case for rejecting claims 31-32 as unpatentable over Michelson alone has not been established. Withdrawal of the rejection of claims 28-32 and 34-35 depending from claim 27 is respectfully requested.

Claims 1-6, 8-19 and 36-38 were rejected under 35 USC §103(a) as unpatentable over Michelson in view of U.S. Patent No. 5,055,104 to Ray. The Office Action indicates that Michelson does not disclose the ports together forming an oval shaped working channel port through the distal portion and the guide sleeve housing does not include a medial wall in said proximal chamber between said first and second working channel ports. The Office Action then asserts that Ray discloses a device (Fig. 9, ref. 80) with ports (Fig. 87, ref. 90)(col. 6, lines 6-22) that are used to deliver instrumentation into a vertebral space, and that it "would have been obvious to a person having ordinary skill in the art at the time the invention was made to have substituted the ports of Ray with the ports of Michelson, in order to achieve the predictable result of providing ports to allow the delivery of instrumentation into a vertebral space. The ports would then form an oval shape (Fig. 8) and not have a medial wall separating them (Fig. 8)."

The assertion is traversed. Reference 90 in Ray is disclosed as a template that includes two circular openings 91 and 92 that act as guides for a pilot drill. Thus, "port" 90 identified in the Office Action is a template that includes a medial wall separating circular openings 91 and 92. Furthermore, openings 91 and 92 do not form an oval shape. Therefore, the Office Action fails to provide a reference or combination of references that teach or suggest all the features of claim 1 or claim 36, and withdrawal of this basis of the rejection of these claims is respectfully requested.

Furthermore, Ray discloses that "template-holding retractor 80 is useful for preparing threaded bores to permit the anterior implantation of any of the pairs of male-thread fusions cages 20, 450, or 60 into a disc 81." Ray further discloses that retractor 80 has a wall 86 with "a figure-8 configuration in cross-section to receive each of the five templates that shown in FIGS.

8 and 10-13.” Ray teaches a figure -8 cross-section, and the Office Action fails to provide a reference that teaches or suggests a guide sleeve housing “wherein said first and second working channel ports are in communication with one another through said distal portion to together form an oval shaped working channel port through said distal portion...” as recited in claim 1.

The Office Action also fails to provide any teaching or suggestion of “a central distractor in said chamber of said guide sleeve housing, said central distractor including a distractor tip at a location between said first and second working channel ports, said distractor tip including upper and lower distraction surfaces defining a distraction height therebetween to maintain distraction of a spinal disc space” as recited in claim 36. The Office Action asserts that Michelson discloses a central distractor 102 in Figure 7F that is movably positionable between first and second ports of the guide sleeve. However, there is no disclosure or teaching of a distractor that includes a distractor tip at a location between the first and second working channel ports. The distractor tip in Michelson is located in one port or the other port, but not a location between the ports. Furthermore, the distractor tips in Michelson could not be positioned at a location between the ports of retractor 80 in Ray since the center protrusion into the location between the ports of the figure 8 cross-section provides a mismatched shape with the distractors of Michelson, preventing placement of the distractors at a location between the ports and leading one of ordinary skill in the art to position the distractors in one port or the other where the shape of the distractor shaft matches the shape of the port. Therefore, claim 36 is allowable for this additional reason.

The Office Action also fails to provide a prima facie case for rejecting claims depending from claims 1 and 36. For example, claim 3 recites “wherein said tip of said central distractor is centrally located in said housing.” The Office Action asserts this is shown in Fig. 7F, but Fig. 7F shows distractors that are not centrally located in the guide sleeve, but rather offset from a centrally located position. Further clarification of how Figure 7F can be considered to disclose or teach the elements in claim 3 is respectfully requested. Ray also does not supply any teaching of these features. Therefore, a prima facie case for rejecting claim 3 has not been established.

Claim 8 recites “wherein said housing inserter includes a passageway opening at a proximal end of said handle and at a distally oriented face of said engaging portion, and wherein said shaft of said central distractor is sized for receipt in said passageway so that said housing inserter and said guide sleeve housing are movable along said shaft toward said distractor tip to

position said guide sleeve housing in said operative position.” The Office Action asserts that ref. 162 in Figure 5 is a housing inserter and that it has a passage that opens at a proximal end in Fig. 5 near ref. 168. A review of Figure 5 indicates that ref. 162 is shown in partial section with a hatched area proximally of ref. 168 indicating the presence of a solid wall. Ray also does not supply any teaching of these features. The Office Action fails to provide any indication of proximal opening for ref. 162, and therefore has not supported a prima facie case for rejecting claim 8.

Claim 9 recites “wherein said proximal portion of said guide sleeve housing defines a groove formed in said inner wall that defines said proximal chamber.” This claim is rejected with the assertion that since the inner wall of the guide sleeve housing is curved it forms a groove. Ray also does not supply any teaching of these features. The assertion is traversed since the rejection ignores the features in claim 9 that require the groove to be formed in the inner wall, and the Office Action has failed to identify any disclosure or teaching of this feature.

Furthermore, claim 10 depends from claim 9 and recites “wherein said central distractor includes a housing engaging portion with a finger received in a receptacle, said finger being movable from a location in said receptacle to a location projecting from said receptacle to removably engage said groove of said guide sleeve housing.” The Office Action asserts that ref. 110 is a housing engaging portion with a finger received in a receptacle 354. However, claim 10 clearly requires that the finger project from the receptacle to engage the groove of the guide sleeve housing. The Office Action asserts the groove is the inner surface of ref. 340 in rejecting claim 9. However, ref. 110 clearly does not project from ref. 354 to engage the inner surface of ref. 340. Ray also does not supply any teaching of these features. Therefore, a prima facie case for rejecting claim 10 has not been established, and withdrawal of the rejection of claim 10 is respectfully requested.

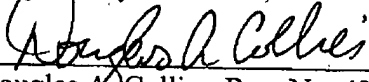
Furthermore, claim 11 depends from claim 10 and recites “said central distractor tip includes a reduced height configuration whereby said upper and lower distraction surfaces are orientable away from vertebral endplates of a spinal disc space and said finger is not engaged to said guide sleeve housing; and said central distractor tip is rotatable to a distraction configuration from said reduced height configuration whereby said upper and lower distraction surfaces are orientable toward vertebral endplates of a spinal disc space and said finger is actuated and

received in said groove thereby coupling said guide sleeve housing to said central distractor.” The Office Action repeats this claim language and refers to Figs. 7F and 7A as disclosing these features. A review of these Figures does not reveal how rotation of ref. 100 would result in ref. 110 engaging the inner surface of ref. 340. Ray also does not supply any teaching of these features. A prima facie case for rejecting claim 11 also has not been established.

Accordingly, claims 2-6 and 8-19 depending from claim 1 and claims 37-38 depending from claim 36 are allowable at least for the reasons the claim from which each depends is allowable. Withdrawal of the rejection of these claims is respectfully requested.

In view of the foregoing remarks, it is respectfully submitted that the present application is in condition for allowance with pending claims 1-6, 8-19, 27-32 and 34-38. Reconsideration of the present application as amended is respectfully requested. Timely action towards a Notice of Allowance is hereby solicited. The Examiner is encouraged to contact the undersigned by telephone to resolve any outstanding matters concerning the present application.

Respectfully submitted,


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